

e) sending a control message to said station that increases said bandwidth of said channel when said step of determining concludes that there is access capacity that can be assigned to said station.

#### REMARKS

Claim 1 is amended to correct a typographical error.

The preliminary examination written opinion makes the following assertions:

1. Claims 1 and 17-19 are anticipated by EPO 847220 (the '220 reference);
2. Claims 2-3 are obvious in light of the '220 reference in combination with WO98/59523; and
3. Claim 14 is obvious in light of the combination of the '220 reference in combination with WO97/24846.

The opinion also states that claims 5-6 and 20-25 **do meet** patentability criteria. No mention is made of claim 4, but the argument below clearly shows that claim 4 also meets the patentability criteria.

Applicant respectfully disagrees with the above-listed three assertions regarding claims 1-3, 14, and 17-19.

The '220 reference teaches a method whereby the actual average transmission rate of a source is measured by the arrival time between consecutive RM cells, and compared against the rate that the source negotiated with the network. When it is determined (by a switch in the network) that the source is transmitting at less than the negotiated rate, the bandwidth that is allocated to the source is reduced, and that is communicated to the source by returning RM cells. The reduction is proportional to the "shortfall" in the transmission. That is, the slower the source is transmitting relative to the allocated rate, the larger the decrease in the allocation. When a transmission rate of the source falls below a "Switch Timeout Factor" threshold, the allocation is reduced to a "floor" value. When the source is idle, and does not transmit RM cells, the source must set its own rate; and the '220 reference states that, following a significant idle period, the source might set its rate to the "floor" value. Thereafter, if the source wishes to transmit again, or to increase its transmission rate from some low value, the allocation is steadily increased by the network until the source's needs are satisfied (see col. 9, lines 36, et seq.).

It is respectfully submitted that the Examiner is incorrect in asserting that independent claim 1 is anticipated by the '220 reference. The Examiner states that the reference teaches ascertaining whether the station is in a silence period or operating at full bandwidth. Presumably, this assertion is directed to the first clause of claim 1, which specifies the step of "first ascertaining whether said station is in a silence period." It is respectfully submitted that the reference does not ascertain whether the source (or the station) is in a silence period. Rather, the reference teaches a step of ascertaining whether the source (station) is transmitting at an average rate that is lower than the negotiated rate. Stated in other words, the reference compares a first variable that can take on any value (the average rate) to a second variable that can take on any value (negotiated rate). It does not compare the transmission rate to a fixed value (the value representative of silence). Moreover, the '220 reference does not mention silence at all.

Admittedly, the '200 reference does mention the idle state of the source, and that is a fixed value. It is also true that when an idle state is detected, the switch reduces the allocation. However, it is not clear that the Examiner asserts that the idle state of a source in the '220 reference corresponds to the silence state of a station in applicant's invention. Since, for purposes of the first clause of applicant's claim 1, such a correspondence makes the Examiner's position stronger, one may assume that the Examiner intended to assert this correspondence. Alas, making such a correspondence makes claim 1 even more novel over the reference because clause 2 of claim 1 states "when said step of first ascertaining concludes that said station is in a silence period, sending a control message to said station that reduces bandwidth of said channel." In contradistinction, when an idle state is detected, no control signals are sent in the '220 reference from the switch to the source. The source is left to recognize that it is idle and to reduce its rate on its own initiative.

The third clause of claim 1 states: "when said step of second ascertaining determines that said station is in an active period, determining whether there is excess capacity that can be assigned to said station." No such step is found in the teachings of the '220 reference. While the Examiner cites col. 2, lines 9-42, which encompass essentially the entire Summary of the Invention, those lines do not support an assertion that the switch in the '220 reference ascertains whether there is excess capacity

when a station becomes active. To the contrary, the above-cited text in col. 9, lines 36 et seq. shows that no consideration is given to whether there is excess capacity when a source becomes more active (this makes good sense, since the source negotiated for a particular bandwidth, and should be given that bandwidth – if at all possible).

Since the reference fails to teach the third clause of claim 1, it turns out that the fourth clause, being based on the third clause, is also not taught by the '220 reference.

In short, a careful review of claim 1 leads to the conclusion that most of the elements of claim 1 are not taught by the '220 reference and, accordingly, it is believed that claim 1 does not lack novelty. Claims 17-19 depend on claim 1 and, therefore, it is believed that claims 17-19 also do not lack novelty in view of the '220 reference.

In connection with claims 2-3, the Examiner cites the WO 98/59523 reference for the proposition that the source can be a cell phone. That, of course, does not overcome the above-discussed deficiencies in the '220 reference relative to claim 1. Accordingly, it is believed that claims 2-3 are not obvious in view of the '220 reference taken together with the WO 98/59523 reference.

In connection with claim 14, the Examiner cites the WO 97/24846 reference for the proposition that the source communicates in packets. That, too, does not overcome the above-discussed deficiencies in the '220 reference relative to claim 1. Accordingly, it is believed that claim 14 is not obvious in view of the '220 reference taken together with the WO 97/24846 reference.

In light of the above amendments and remarks, it is respectfully submitted that all of the claims are patentable, and it is respectfully requested that the Examiner reach this conclusion.

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Respectfully,  
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Amendments showing changes made

In the claims:

**2. (Amended)** A method, executed in a control node, for controlling bandwidth of communication from a station to a destination module, where said station sends packets that carry a voice signal in a channel specified by said control node, comprising the steps of:

- a) first ascertaining whether said station is in a silence period;
- b) when said step of first ascertaining concludes that said station is in a silence period, sending a control message to said station that reduces bandwidth of said channel;
- c) second ascertaining whether said station is in an active period;
- d) when said step of second ascertaining determines that said station is in an active period, determining whether there is [access] excess capacity that can be assigned to said station; and
- e) sending a control message to said station that increases said bandwidth of said channel when said step of determining concludes that there is access capacity that can be assigned to said station.